Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

AMERICAN

Journal of Mathematics.

SIMON NEWCOMB, Editor.
THOMAS CRAIG, Associate Editor.

PUBLISHED UNDER THE AUSPICES OF THE

JOHNS HOPKINS UNIVERSITY.

Πραγμάτων ἔλεγχος οὐ βλεπομένων.

VOLUME VII.

BALTIMORE: PRESS OF ISAAC FRIEDENWALD.

AGENTS:

B. WESTERMANN & CO., *New York.*
D. VAN NOSTRAND, *New York.*
E. STEIGER & CO., *New York.*
JANSEN, MCCLURG & CO., *Chicago.*
CUSHINGS & BAILEY, *Baltimore.*
CUPPLES, UPHAM & CO., *Boston.*
TRÜBNER & CO., *London.*
A. HERMANN, *Paris.*
GAUTHIER-VILLARS, *Paris.*
MAYER & MÜLLER, *Berlin.*
ULRICO HOEPLI, *Milan.*
KARL J. TRÜBNER, *Strassburg.*

1885.

INDEX.

PAGE

BUCHHEIM, ARTHUR. A Memoir on Biquaternions, ... 293

CAYLEY, A. A Memoir on Seminvariants, ... 1

Tables of the Symmetric Functions of the Roots, to the Degree 10, for the Form

$$1 + bx + \frac{cx^2}{1.2} + \ldots = (1 - \alpha x)(1 - \beta x)(1 - \gamma x) \ldots$$ 47

Non-Unitary Partition Tables, ... 57

Seminvariant Tables, ... 59

A Memoir on the Abelian and Theta-Functions (Chapter IV-VII), continued from Vol. V, ... 101

CRAIG, THOMAS. On a Certain Class of Linear Differential Equations, . . . 279

DANIELS, A. L. Third Note on Weierstrass' Theory of Elliptic Functions, . . 82

FRANKLIN, F. Note on the Theorem $e^{ix} = \cos x + i \sin x$, ... 376

Proof of a Theorem of Tchebycheff's on Definite Integrals, ... 377

GLASHAN, J. C. Notes on the Quintic, ... 178

GOMES-TEIXEIRA, F. Note sur les Nombres de Bernoulli, ... 288

HAMMOND, J. On the Syzygies of the Binary Sextic and their Relations, . . 327

JENKINS, MORGAN. Note on Prof. Sylvester's "Constructive Theory of Partitions," 74

JOHNSON, WM. WOOLSEY. Reduction of Alternating Functions to Alternants, . 345

On a Formula of Reduction for Alternants of the Third Order, . . . 347

On the Calculation of the Co-factors of Alternants of the Fourth Order, . 380

MACMAHON, P. A. On Perpetuants, ... 26

A Second Paper on Perpetuants, ... 259

NIXON, H. B., AND FIELDS, J. C. Bibliography of Linear Differential Equations, . 353

PEIRCE, C. S. On the Algebra of Logic, ... 180

POINCARÉ, H. Sur les Equations Linéaires aux Différentielles ordinaires et aux Différences finies, ... 203

SEELHOFF, P. Prüfung grösserer Zahlen auf ihre Eigenschaft als Primzahlen, . 264

STORY, WILLIAM E. The Addition-Theorem for Elliptic Functions, . . . 364

VENEZIANI, C. Extrait d'une Lettre de M. Hermite. Note to same, . . . 168

YOUNG, GEORGE PAXTON. Solution of Solvable Irreducible Quintic Equations, without the aid of a Resolvent Sextic, ... 170

Solvable Irreducible Equations of Prime Degrees, ... 271